

## CLAIMS

1. A microphone structure comprising a microphone capsule (200; 300), which has at least first and second output contact, and within said microphone capsule  
 - means for converting changes in air pressure to an electrical signal,  
 5 - preamplifier (Q2; Q3) having first and second output conductor and  
 - a first capacitor (C21; C31) connected between said output conductors of the preamplifier, **characterized** in that it further comprises at least one electro-static discharge protector (VDR2; ZD) connected between said output contacts of microphone capsule and, within the microphone capsule, a first impedance (R21;  
 10 R31) in series between said first output conductor and said first output contact.
2. A microphone structure according to claim 1, **characterized** in that said electro-static discharge protector is within the microphone capsule.
3. A microphone structure according to claim 1, **characterized** in that said electro-static discharge protector is outside the microphone capsule, close by this.
- 15 4. A microphone structure according to claim 1, **characterized** in that it further comprises at least second impedance (Z) in series with said first impedance and at least second capacitor (C33).
5. A microphone structure according to claim 4, **characterized** in that at least one of said series impedances is resistive.
- 20 6. A microphone structure according to claim 4, **characterized** in that at least one of said series impedances is inductive.
7. A microphone structure according to claim 4, **characterized** in that said capacitors and structure parts having series impedance form a ladder network.
8. A microphone structure according to <sup>claim 2</sup> ~~claims 2 and 4~~, **characterized** in that the  
 25 preamplifier, electro-static discharge protector, said series structure parts and said capacitors are on the same circuit board (41).
9. A microphone structure according to claim 4, **characterized** in that at least some of said electronic structure parts are inside the same integrated circuit (IC).
10. A microphone structure according to claim 1, **characterized** in that the  
 30 electro-static discharge protector is a varistor (VDR2).

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